iPhone or Android? Governments Ponder App Development Strategies

Chad Vander Veen | July 28, 2011

Android, iPhone, iPad, BlackBerry, tablet — it seems no one talks about the dependable desktop computer anymore. Even laptops are losing their luster in light of the mobile revolution. Sure, a few MacBook Air commercials sneak their way onto TV every now and then. But it might be a decent bet to presume that when people see an ad for a MacBook Air they think, “Hey, that looks like an iPad with a keyboard.”

There’s a lot of buzz about the mobile revolution — that we’re beginning the permanent switch from accessing Web content on stationary devices to accessing it whenever and wherever we happen to be. Circumstantial evidence and hard numbers suggest this change is occurring. The Pew Internet and American Life Project found in February that 85 percent of all adults own a cell phone, while only 59 percent and 52 percent owned a desktop and a laptop, respectively. A March report from Pew also found that 47 percent of all American adults get news and information on a cell phone or tablet computer. The numbers are astonishing given the relatively brief time that smartphones — and tablets even more so — have been available to consumers.

For private companies, the mobile revolution represents massive profit potential. Advertisements, coupons and other incentives can be delivered to potential customers at anytime. But for government, this societal shift presents murkier benefits and a host of problems. Strategies for catering to a mobile constituency range from fervid embrace to nonexistence and every point in between. Perhaps an organic, universal blueprint for governments toiling in this new era will emerge, but it may simply become a case of every agency for itself.

Market Savvy

It’s hard to believe that the iPad was launched just a year and a half ago. And with 20 million units sold, tablet computers are the hottest devices in the technology industry. But before government agencies can begin to develop websites and applications for mobile users, they must first get their arms around a technology marketplace that changes at blinding speed.

“There are so many different things converging at once,” said Phil Bertolini, CIO of Oakland County, Mich. “You think about the device itself as a kind of convergence communication device. There could be a new one a month from now. Those devices started coming and now they are coming fast.”

Indeed, the smartphone market has been in a state of flux since its inception. Where BlackBerry was once dominant, Apple and Android now rule. One month the iPhone might be No. 1, but the next, Android takes the top spot. And now with tablets from Apple, Samsung, Sharp and dozens of other electronics makers, there’s great variety in the devices being used to get online.

The wide variety of devices can mean headaches for CIOs and their staffs. How do you choose which device will be your primary development platform? Is it important to develop apps? If so, what should they do? Should you have a mobile version of your website? Does any of this stuff need to be optimized for tablets? These are just a few of the questions public-sector IT is asking.

And perhaps the most important question: While data shows a marked increase in the number of smartphone owners, do those same numbers translate to smartphone users? In other words, are

more people really using the devices to access government Web content?

“I agree that [smartphone usage] is certainly on the rise,” said Bill Greeves, director of communications and IT in Roanoke County, Va. Greeves is also a co-founder of MuniGov, a coalition that aims to improve citizen service with Web 2.0 tools. “For us here, because of our demographic, it’s not this massive influx of ‘Oh my gosh, we have to have everything mobile and we have to do it today.’ We are not that far advanced technologically as a community as maybe some other areas like San Francisco or Seattle,” said Greeves. “But we do certainly have a growing community of smartphone users, and we recognize that. And we certainly want to not just offer services in that regard, but maybe even take advantage of that and provide better, fast and more reliable self-service.”

In Boston, CIO Bill Oates and his staff have been actively addressing the rapid growth they’re seeing in citizens accessing the city’s website using mobile devices. Boston was one of the first to launch a dedicated mobile version of its website and has continued to explore and develop mobile apps. Raj Pareek, who leads the city’s e-government initiatives, said that from the onset they’ve been thoughtful about what type of information people access on mobile devices. Usage statistics were instrumental in deciding what went on the mobile version of cityofboston.gov.

“I think that even from the beginning, we didn’t want to put all of our content from the website and slap it on mobile devices,” Pareek said, noting that they’ve recently added targeted data that’s easily accessible for citizens on the go. “We are seeing almost a 250 percent increase in people who are accessing the legislation agenda, City Council minutes and documents, especially from tablets like iPad and Android devices.”

For agencies that are still on the fence about developing apps or launching a mobile-optimized website, the first step — as it was in Boston — is to examine existing Web traffic and identify pages that are both popular and conducive to “mobilization.”

Sara Walsh, Web content manager of Boston’s Department of Innovation & Technology, said the city identified services like parking, public safety and visitor information as ideal candidates for the mobile site.
“I think with the mobile site we are trying to give people a quicker entry way into the type of content that they would be looking for when they are on the go,” Walsh said. “We have tried to highlight parking services, visitor information, snow information when that’s seasonal, public safety and elections.”

The result, according to Pareek, has been a 500 percent increase in traffic coming from mobile devices, excluding tablets.

Boston is also among many cities that have dipped their toes in the app development waters. Boston’s mobile 311 app, called Citizens Connect, launched for the iPhone last year, has since been ported to Android’s operating system and is now available for most Android smartphones.

App Assistance

Dozens of other cities, such as San Jose, Calif., and neighboring San Francisco have launched similar apps. San Jose worked with a company, called CitySourced, to help build its mobile 311 app. CitySourced, along with companies like SeeClickFix and CivicPlus, are among a growing number of businesses that can help cities create smartphone and Web-based apps for reporting municipal issues like graffiti and potholes.

In Mission Viejo, Calif., Jackie Alexander, director of IT, said the city recently unveiled an app for

Android and iPhone that essentially rolls 311 and a mobile website into one.

“We have seen an explosive amount of growth in mobile access to all of our services,” Alexander said. “Earlier this year, we put out a mobile application for the iPhone and Android.” The app, called Access MV, allows a user to report a problem — and submit photos and GPS locations for the issue. The app then generates a service request that gets pushed into the city’s CRM system with a full workflow and notification. In addition, the app lets users receive a wide range of city news and information.

One solution, YouTown, promises that a government agency can create a mobile app for itself in a matter of minutes. Developed by Seattle-based DotGov, YouTown requires a user to do little more than fill out a basic information form. Following verification, a mobile app featuring news feeds, social media, local maps, a calendar of community events and access to government services will be generated. The basic app creation service is free. However, YouTown offers more advanced features for a fee.

Six cities are involved in a sort of beta test for YouTown. One of them is Overland Park, Kan., whose CIO, Vickie Irey, said her city decided on YouTown based partially on the fact that a survey showed 98 percent of city residents are connected to the Web. Given that data, Irey said it made sense that many city residents would likely use mobile devices to get online.

“[Today] if you go to get a phone, you aren’t even going to get one unless it’s a smartphone — unless you’re my Mom,” Irey said. “Our city manager, our mayor, myself — we all believe that this is where it is going, and we are going to get on a path to be there.”

Overland Park’s current YouTown app is modest. Irey said it includes event notifications, a park map and city news releases. Residents interested in acquiring the app need only visit the App Store on Apple iTunes and download it to their iPhone. Irey said she expects the app to be available for Android users soon.

What’s most appealing about having a mobile app, Irey said, is that it requires minimal investment, can be done by a third party and is another method of delivering service to citizens.

“We have so much to offer on our website — people really don’t have to come in here unless they like to come and see a face and talk to us. Almost every service possible is on there,” she said. “You can pay a ticket as long as you don’t need to appear in front of a judge; you can get a building permit, license your dog, sign up for swimming lessons — every conceivable thing we have on the Web. Now the deal is, can I do those same things on my phone?”

Cross-Platform Development

Though BlackBerry is no longer top dog in the smartphone circuit, RIM is making a significant investment in the tablet market with its recently launched PlayBook. And RIM isn’t the only one. Microsoft’s Windows 7 smartphone is making some headway in terms of adoption, and Android — the smartphone champion for the moment — has dozens of tablet devices to challenge the iPads’ short but certain dominance.

So how does an agency decide for which device to develop? The free, aforementioned solutions are likely adequate for many agencies. But where does one begin if the goal is a more robust app or perhaps one for internal use?

A possible solution is the AT&T Mobile Enterprise Applications Platform (MEAP). Though known by most — and loathed by some — as the exclusive carrier for the original iPhone, AT&T’s MEAP can

help agencies build non-OS-specific apps, which MEAP then ports to function on Android, BlackBerry, iPhone, Palm OS and Windows Mobile.

“It is really an interesting time, because smartphones passed the sales of PCs for the first time,” said Abhi Ingle, vice president of AT&T’s Advanced Enterprise Mobility Solutions Group. “And that happened about two years before it was predicted, which itself was a prediction made only like a year and half before it happened. So it is pretty amazing what has happened in the penetration and adoption of these devices.”

Government has long been deemed a slow mover when it comes to technology adoption. True or not, keeping on top of the wildly fluctuating smartphone and tablet market is tough for any organization.

“What we’ve done is focus on all the elements you need to survive and thrive in a world in which you have to deal with multiple operating systems, a plethora of cloud-delivered applications and you have a situation that you can buy a host of these essentially mobile computers for a very low price,” Ingle said.

MEAP helps dispel the notion, Ingle said, that one must choose a native app and work out from there. He advises that the best way to begin app development is to look at which apps people are using and how they use them.

“It depends on what you’re trying to achieve,” he said. “If it’s a very rich interactive experience, I strongly recommend a native app; if it is a fairly simple experience, I recommend a mobile Web solution; if it is even simpler, like alerting, I would recommend a [short message service] solution.”

With new, fancier devices appearing on the market seemingly every week, many CIOs probably — and rightfully — think they must get a foot in the mobile Web space. And clearly, there are solutions and services to help them take that step.

But what do citizens — the ones for whom all this strategizing and development is ultimately for — think? Are mobile websites and apps really in demand?

Sid Burgess is CEO of LittleGov, an Oklahoma City-based consultancy that aims to help “communities realize their potential through the proper application of planning, innovation and elbow grease.” Burgess also sits on the Oklahoma Technology Review Board. In his opinion, the app rush is overblown and, for many agencies, starting somewhere simpler is a more sensible strategy.

“The majority of cities still don’t have websites even, and so again, we are in a pickle,” he said. “Do we pitch to these towns of 5,000 that don’t have a website to go get a mobile app, and we will maintain the app suite for them and they can put all of their data on there? The problem now is that you have created a new divide between cities that are only mobile and cities that are Web-based. So citizens are going to be confused.”

Start small, Burgess advises. And if you’ve already started, go forward by being specific.

“The smart thing to do is for cities to consider mobile apps as a way to provide niche services like 311,” he said. “But if they don’t have a website, they need to get a website — they need to get updated and they need to continue to update it. That’s what just makes sense to me. I am not a CIO and I certainly don’t have the perspective a lot of guys that have been here a lot longer than me have, but as both the consumer and an advocate, that’s the way I see it.”